DOCUMENT RESUME

ED 374 723 HE 027 729

TITLE State University Construction Fund. Performance Indicators. Report-94-S-24.
INSTITUTION New York State Office of the Comptroller, Albany. Div. of Management Audit.
PUB DATE 12 Sep 94
NOTE 21p.
PUB TYPE Reports - Evaluative/Feasibility (142)

EDRS PRICE MF01/PC01 Plus Postage.
DESCRIPTORS *Audits (Verification); *College Buildings; Construction Costs; *Construction Management; Data Analysis; Educational Facilities; Evaluation Criteria; Financial Audits; Higher Education; *Institutional Evaluation; *Performance Factors; Reliability; *State Agencies; Universities
IDENTIFIERS *New York State University Construction Fund

ABSTRACT

This report presents the results of an 1990-93 audit of the New York State University Construction Fund (SUCF) to assess the need for service efforts and accomplishments (SEA) indicators that address overall construction efficiency, economy, and effectiveness issues. The audit also assessed the reliability of SUCF's construction project data and determined how the data were used to manage construction activities. The audit interviewed SUCF staff, surveyed related agencies, and reviewed SUCF records and procedures. The audit found that while SUCF has processes to manage individual projects and the construction program in total, it did not utilize performance measures or SEA indicators to report how well it performed in fulfilling its mission. The audit also found that SUCF's construction project data were reliable. The report recommends that SUCF: (1) work with other construction agencies to identify key construction performance indicators; (2) assess the availability of the data required for the identified indicators and develop systems needed to collect appropriate data; and (3) publicly report the identified performance indicators on at least an annual basis. Three appendixes list the contributors to the report, and offer the comments of SUCF on the report. Contains 28 references. (MDM)

****
* Reproductions supplied by EDRS are the best that can be made *
* from the original document. *
****

ED 374 723

HE027729

U.S. DEPARTMENT OF EDUCATION
Office of Educational Research and Improvement
EDUCATIONAL RESOURCES INFORMATION CENTER (ERIC)

☑ This document has been reproduced as received from the person or organization originating it.

☐ Minor changes have been made to improve reproduction quality.

• Points of view or opinions stated in this document do not necessarily represent official OERI position or policy.

"PERMISSION TO REPRODUCE THIS MATERIAL HAS BEEN GRANTED BY

State of New York
Office of the State Comptroller

TO THE EDUCATIONAL RESOURCES INFORMATION CENTER (ERIC)."

BEST COPY AVAILABLE

HE

State of New York
Office of the State Comptroller

Division of Management Audit

Report 94-S-24

Mr. Richard H. Speranza
Chairman
State University Construction Fund
State University Plaza
Albany, New York 12201

Dear Mr. Speranza:

The following is our report on performance indicators for the State University Construction Fund.

The audit was performed pursuant to the State Comptroller's authority as set forth in Section 1, Article V of the State Constitution, Section 8, Article 2 of the State Finance Law, and Section 377, Article 8A of the Education Law. Major contributors to the report are listed in Appendix A.

Office of the State Comptroller
Division of Management Audit

September 12, 1994

Executive Summary

State University Construction Fund Performance Indicators

Scope of Audit

Performance indicator reporting is a way to present program results in a measurable and meaningful manner. This type of reporting is also known as Service Efforts and Accomplishments (SEA) reporting. The objective of SEA reporting, according to the Governmental Accounting Standards Board (GASB), is to provide management, elected officials and the public, with more complete information about a governmental entity's performance (i.e., results of operations) than is provided in traditional financial reports. Essentially, SEA indicators should indicate what was spent, what was accomplished and how efficiently and effectively funds were used, thereby improving accountability.

The State University Construction Fund (SUCF) is responsible for implementing the State University of New York's Master Capital Plan in a timely manner, with quality design and workmanship and at a reasonable cost. The State University system relies on SUCF to rehabilitate its existing facilities and to build new facilities at various campuses throughout the State. The workload of projects undertaken by SUCF is predominantly (92 percent) rehabilitation of existing structures. In fiscal year 1992-93 SUCF had approximately 130 staff and spent about $177.8 million for project administration, design and construction.

Our audit, which covered the period April 1, 1990 through December 31, 1993, focused on the need for SEA indicators in the SUCF. Our audit addressed the following questions about SUCF:

- To what extent does SUCF use and report SEA indicators, that address overall construction efficiency, economy, and effectiveness issues?

- Is SUCF's construction project data reliable and how is it used by SUCF to manage construction activities?

Audit Observations and Conclusions

Nationwide, SEA reporting is receiving greater attention, although only a relatively small number of construction organizations are currently reporting such data. We found that generally, SUCF has processes to manage individual projects and the construction program in total. SUCF does not utilize performance measures or SEA indicators to report how well it performs in fulfilling its mission. We believe a formalized SEA

reporting system can be an effective management tool that would complement SUCF's existing construction management practices. It would also provide a vehicle for SUCF to effectively communicate the results of its efforts to elected officials, other interested parties and the citizens of the State.

In any construction project, there are three items which need to be controlled: time, cost and quality. In providing oversight of construction projects, SUCF collects an extensive amount of time and cost data which it uses to track the progress of each project. SUCF's managers judge their overall process by assessing how well they secure the maximum level of appropriations, how well they match appropriations to identified projects and how closely the funded projects meet expenditure ceilings. In addition, SUCF managers indicated they control project quality by assuring adherence to standards throughout the design and construction phases. Further, management has stated that, to some degree, quality issues are addressed through direct communication with users, however, such data is not currently captured on SUCF's project management system. Nevertheless, we determined that SUCF's controls over the project data that is currently collected are good and that the data is reliable. (see pp. 3-6)

We found the available time and cost data lends itself to the development of SEA indicators for the agency's key functions: planning, design and construction management. Reporting such indicators would improve public accountability by showing the results of SUCF's efforts to accomplish its mission. Although SUCF must ultimately decide which indicators fairly represent the results of its efforts, we used the data available to management to develop examples of indicators SUCF may report. Our examples cover topics such as change order activity, construction contract completion time, and bid competition. Using data that is already available to SUCF, we show how SEA indicators could be applied to SUCF's administration of construction projects and used to report how effective SUCF is in fulfilling its mission. (see pp. 6-10)

We believe SUCF could benefit by the use of SEA indicators. SUCF, in conjunction with other construction agencies, should identify key construction performance indicators and then provide for the collection of all necessary data. SUCF will then be in a position to provide more complete and therefore, more useful information to elected officials, other interested parties and the citizens of the State. In addition, by using SEA indicators, management will have a useful tool to better manage its projects. (see pp. 10-11)

Comments of Agency Officials

SUCF officials agree with our recommendations. SUCF management recognizes the potential benefits of developing and reporting SEA indicators and indicated a willingness to consider this concept. Their response is attached in its entirety as Appendix B.

Contents

Introduction	Background	1
	Audit Scope, Objectives and Methodology	1
	Response of SUCF Officials to Audit	2
Performance Indicators	Performance Indicator Reporting Nationwide	3
	SUCF's Construction Data Collection and Accomplishment Reporting	5
	Project Data Is Reliable	6
	Reporting the Results of SUCF's Efforts	6
Appendix A	Major Contributors to This Report	
Appendix B	Comments of Agency Officials	
Appendix C	Bibliography	

Introduction

Background

Performance indicator reporting is a way to present program results in a measurable and meaningful manner. This type of reporting is also known as Service Efforts and Accomplishments (SEA) reporting. The objective of SEA reporting, according to the Governmental Accounting Standards Board (GASB), is to provide management, elected officials and the public, with more complete information about a governmental entity's performance (i.e., results of operations) than is provided in traditional financial reports. Essentially, SEA indicators should indicate what was spent, what the citizens received for their money and how efficiently and effectively those funds were used. The GASB further states that SEA information should be relevant, understandable, comparable, timely, consistent and reliable.

The State University Construction Fund (SUCF) is responsible for implementing the State University of New York's Master Capital Plan in a timely manner, with quality design and workmanship and at a reasonable cost. The State University system relies on SUCF to rehabilitate its existing facilities and to build new facilities at various campuses throughout the State. The workload of projects undertaken by SUCF is predominantly (92 percent) rehabilitation of existing structures. In fiscal year 1992-93, SUCF had approximately 130 staff and spent about $177.8 million for project administration, design and construction.

Audit Scope, Objectives and Methodology

Our audit focused on the need for service efforts and accomplishments indicators that address overall construction efficiency, economy, and effectiveness issues, and determined the extent to which SUCF reports such data. We also assessed the reliability of SUCF's construction project data and determined how that data is used to manage construction activities. Our audit covers the period April 1, 1990 through December 31, 1993.

To accomplish our objectives, we interviewed SUCF administrative, planning, design and construction managers, and contacted other governmental design and construction agencies through written questionnaires and telephone surveys. We assessed the controls over the collection of project time and cost data and performed various tests we deemed necessary to determine whether the information provided is reliable. In addition, we reviewed relevant SUCF procedures, SUCF

records and various government reports related to performance indicators. A bibliography of these government reports is included as Appendix B.

We conducted our audit in accordance with generally accepted government auditing standards. Such standards require that we plan and perform our audit to adequately assess those operations of SUCF which are included within the audit scope. Further, these standards require that we understand SUCF's internal control structure and compliance with those laws, rules and regulations that are relevant to SUCF's operations which are included in our audit scope. An audit includes examining, on a test basis, evidence supporting transactions recorded in the accounting and operating records and applying such other auditing procedures as we consider necessary in the circumstances. An audit also includes assessing the estimates, judgments, and decisions made by management. We believe that our audit provides a reasonable basis for our findings, conclusions and recommendations.

We use a risk-based approach when selecting activities to be audited. This approach focuses our audit efforts on those operations that have been identified through a preliminary survey as having the greatest probability for needing improvement. Consequently, by design, finite audit resources are used to identify where and how improvements can be made. Thus, little audit effort is devoted to reviewing operations that may be relatively efficient or effective. As a result, our audit reports are prepared on an "exception basis." This report, therefore, highlights those areas needing improvement and does not address activities that may be functioning properly.

Response of SUCF Officials to Audit

Draft copies of the matters contained in this report were provided to SUCF officials for their review and comment. Their comments have been considered in preparing this report.

Within 90 days after final release of this report, as required by Section 170 of the Executive Law, the Chairman of the State University Construction Fund shall report to the Governor, the State Comptroller, and leaders of the Legislature and fiscal committees, advising what steps were taken to implement the recommendations contained herein, and where recommendations were not implemented, the reasons therefor.

Performance Indicators

We observed that the reporting of achievements and program results nationwide is receiving greater attention; however, only a relatively small number of construction organizations are currently reporting such data. We found SUCF's capital process creates an extensive amount of data that is used to oversee projects and to manage activities (e.g., cost and time variances). We determined that SUCF's project data is reliable. Further, we found that generally SUCF has processes to manage individual projects and the program in total. SUCF does not utilize performance measures or SEA indicators to report how well it performs in fulfilling its mission. We believe a formalized performance measurement and reporting system can be an effective management tool that would complement SUCF's existing construction management practices and would provide a vehicle for SUCF to enhance accountability and to effectively communicate the results of its efforts to elected officials and the citizens of New York State.

Performance Indicator Reporting Nationwide

The GASB has researched and reported on the external reporting of selected SEA indicators. The GASB research team reported that their findings strongly suggest that the time has come for major experimentation with implementing SEA measurements and with reporting SEA indicators to elected officials and the public. They further found that SEA information, where reported, has been of significant value to elected officials and citizens in assessing the results of government programs, leading to improvements in efficiency and effectiveness in accomplishing program goals and objectives. The following are samples of some SEA-related activities we noted taking place at the Federal, state and local level.

Finding that waste and inefficiency in Federal programs undermine American confidence in government and that managers are disadvantaged in their efforts to improve program efficiency and effectiveness, because of insufficient articulation of program goals, the Congress recently passed the Government Performance and Results Act of 1993 (GPRA). The GPRA requires that Federal agencies:

- develop strategic plans for program activities;

- prepare annual performance plans covering each program activity, including performance goals expressed in objective, quantifiable and measurable forms; and

- report annually, actual program performance for the previous year.

These requirements are intended to improve program effectiveness and public accountability by holding Federal agencies accountable for achieving program results.

Several states have begun experimenting with using SEA indicators to facilitate budgetary decision making. The following example is useful in that it shows obstacles may be encountered in the development and implementation of SEA indicators. The United States General Accounting Office (GAO) issued a report in February 1993 entitled "Performance Budgeting - State Experiences and Implications for the Federal Government." This report resulted from a study of five states (Connecticut, Hawaii, Iowa, Louisiana and North Carolina) regarded as leaders in performance budgeting. The objectives of the GAO study were to determine whether the selected states used performance measures for budget decision making, and to determine the potential implications of state experiences for Federal efforts to institute performance budgeting. The study found that resource allocations continue to be driven, for the most part, by traditional budgeting practices. State officials encountered difficulties in achieving consensus on meaningful performance measures, noted dissimilarities in program and fund reporting structures, and acknowledged the limitations of current accounting systems. According to the report, officials at the Federal level anticipate similar problems. Overall, the GAO report observed that there was a strong commitment, among the state and Federal officials interviewed, to improve performance measurement within the public sector. Although these states are moving in the direction of SEA reporting, change will not likely happen overnight.

We obtained a Portland, Oregon annual report which shows, for six major programs (e.g. police, fire, parks and recreation, etc.), spending, workload and results. The report compares fiscal year accomplishments to the prior three years and to planned goals and performance objectives. It also compares Portland's spending, staff levels, and workload to six similar cities. In addition, Portland surveyed its citizens to determine how they felt about the quality of city services. It appears Portland is one of the leaders in SEA reporting.

On December 31, 1992, Governor Cuomo ordered the creation of a Statewide Quality through Participation Initiative. That initiative includes a provision for continuous improvement. We believe the adoption of SEA indicator reporting would help agency efforts toward fulfilling this initiative. The executive order explains continuous improvement as, "A

government where consistent evaluation and improvement, using key quality criteria, are built into all operations. Individuals and work groups will routinely assess and refine programs, procedures, and policies in the interest of better meeting the public's changing requirements and standards of excellence."

SUCF's Construction Data Collection and Accomplishment Reporting

The construction process for every project includes three primary phases: planning, design and construction. In any construction project there are three items which need to be controlled: time, cost and quality. In providing oversight of construction projects, SUCF collects an extensive amount of time and cost data which it uses to track the progress of each project. However, we noted SUCF does not have adequate data on quality.

SUCF's Office of Project Control and Initiation is primarily responsible for ensuring that all requirements to start project design are in place including: project viability, project budget, cost estimates, design contract, and resource allocation.

SUCF's Office of Design is responsible for administering and supervising the preparation of design drawings and specifications for all SUCF projects, determining environmental impact and selecting the design consultant. This office monitors project progress through routine coordinator reports that are updated monthly. Review most often occurs on an individual project basis, and available data is usually not aggregated.

SUCF's Office of Construction Management is responsible for construction execution from construction contract award through project completion. The goal of this office is to deliver completed projects according to design and contract on time and with quality field construction. This office reviews change order activity on both a project level and an overall summary level. Further, this office routinely reviews timeliness by comparing payment percentages to elapsed time on a project-by-project basis.

SUCF's managers judge their overall process by assessing how well they secure the maximum level of appropriations, how well they match appropriations to identified projects and how closely the funded projects meet expenditure ceilings.

SUCF managers indicated they control project quality by assuring adherence to design standards throughout the design and construction phases. Further, management has stated that, to some degree, quality

issues are addressed through direct communication with users, however, such data is not currently captured on SUCF's project management system. SUCF has not developed formal parameters to assess construction quality.

Project Data Is Reliable

We obtained project data from SUCF for all construction contracts that had activity on or after April 1, 1990 through June 30, 1993. We assessed the controls over the collection of project time and cost data and performed various tests we deemed necessary to determine whether the information provided is reliable, including a comparison with similar data from the State Accounting System and verification of selected data elements, for a sample of projects, to source documents. We determined controls over data collection are good and construction project data is reliable.

Reporting the Results of SUCF's Efforts

We found the available time and cost data lends itself to the development of objective performance indicators for the agency's key functions: planning, design and construction management. Reporting such data would enhance public accountability by showing the results of SUCF's efforts to accomplish its mission.

SUCF must ultimately decide which indicators fairly represent the results of its efforts. However, we used the data currently available to management to develop examples of indicators SUCF may report.

We found that GASB research indicates there are three performance measurement categories: those that measure service efforts, those that measure service accomplishments, and those that relate service efforts to accomplishments.

Service efforts (input indicators) can be measured by the amount of financial and non-financial resources (i.e., money, personnel, equipment, materials, etc.) put into a program or process. We found that some of SUCF's current reporting practices begin to address SEA concepts. For example, SUCF provides fiscal year project costs (i.e., consultant design and construction costs) and operating costs (i.e., administrative, planning, SUCF design and project oversight costs) in its annual reports. This data provides interested parties with an understanding of the resources used by SUCF in pursuit of its mission. Table 1 contains a summary of SUCF project and operating costs for each of the three fiscal years ended March 31, 1991, 1992 and 1993.

TABLE 1 Project and Operating Expenditures by Fiscal Year (1)			
Fiscal Year Ended March 31	Project Costs	Operating Costs	Total
1991	$106,284,689	$8,350,345	$114,635,034
1992	133,275,886	7,750,381	141,026,267
1993	169,299,230	8,471,878	177,771,108
Total	$408,859,805	$24,572,604	$433,432,409
(1) As Reported in Audited Financial Statements.			

Service accomplishment indicators (output and outcome indicators) show what was provided and achieved with the resources used. Output indicators show the quantity of the service provided. Outcome indicators show accomplishments or results that occur because of services provided. SUCF could expand its reporting to include construction output indicators. For example, we developed a table (see table 2) showing the number of consultant design projects completed (i.e., sufficiently completed to enable occupancy) during the period April 1, 1990 through June 30, 1993. We grouped the projects by total costs, to give an indication of the size of these projects. This presentation is an indication of what SUCF accomplished with the resources it used.

TABLE 2 Projects Completed By Cost Classification (1) April 1, 1990 through June 30, 1993		
Total Cost Classification	Number of Projects	Total Actual Cost (2)
UP To $100,000	19	$ 1,140,700
$100,000 To $500,000	107	28,061,400
$500,000 To $1 Million	20	13,766,500
$1 To $5 Million	19	36,314,900
Over $5 Million	4	42,854,300
Grand Total	169	$122,137,800
(1) Includes only those projects designed by an outside consultant and completed during the period.		
(2) Includes actual costs or most recent estimates.		

Performance indicators can further be useful in showing how, overall SUCF is doing to control project costs (i.e., results or outcome). For example, we developed the following two tables (see tables 3 and 4) that show SUCF's efforts have kept average project change order cost to a minimum (3.5 percent) and most (317) projects were completed on time or early. On average completion time was 6.3 percent under estimate.

TABLE 3
Change Order Activity (1)
April 1, 1990 through June 30, 1993

	# of Projects	Award Amount	Construction Costs (2)	Increase (Decrease)	Percent
Increases	325	$277,478,300	$289,652,500	$12,174,200	4.4%
No Change	103	16,636,100	16,636,100	0	0.0%
Decreases	57	29,857,800	29,017,200	(840,600)	-2.8%
Grand Total	485 (3)	$323,972,200	$335,305,800	$11,333,600	3.5%

(1) Includes in-house and consultant design projects completed during the audit period.
(2) Includes actual costs or most recent estimates.
(3) Includes 77 projects where the design and/or construction contract relates to several projects.

TABLE 4
Construction Contract Completion Time (1)
Actual vs Estimate
April 1, 1990 through June 30, 1993

	Number Of Projects	Estimated Days	Actual Days	Delay Over/ (Under)	Average Over/ (Under)	Percent Over/ (Under)
Delayed	88	31,684	41,353	9,669	110	30.5%
On-Time	122	57,498	57,498	0	0	0.0%
Early	195	75,385	55,400	(19,985)	(102)	-26.5%
Total	405 (2)	164,567	154,251	(10,316)	(25)	-6.3%

(1) Includes in-house and consultant design projects completed during the audit period.
(2) Data on timeliness was available for 405 projects.

Indicators that relate efforts to accomplishments show the resources used per unit of output or outcome. An analysis of bid competition is an example of a measure that relates efforts to accomplishments. For example, the following chart (see table 5) shows that it appears increased competition (i.e., as a result of SUCF efforts) may result in decreased construction contract award amounts (i.e., accomplishments). In most instances (576), SUCF obtained three or more bids for each project and on average was successful in obtaining a construction contract totaling

6.5 percent below the design estimate of construction. This type of data may further be useful in assessing design manager success in estimating construction costs.

TABLE 5
Bid Competition (1)
April 1, 1990 through June 30, 1993

				Difference	
Number Of Bids	Number Of Projects	Pre-Bid Estimate (2)	Award Amount	Amount	Percent
1	6	$ 639,000	$ 625,200	$ (13,800)	-2.16%
2	22	3,919,000	3,734,900	(184,100)	-4.70%
3-7	281	342,090,800	334,843,100	(7,247,700)	-2.12%
8-10	115	130,753,600	122,371,700	(8,381,900)	-6.41%
>10	180	162,564,600	136,567,600	(25,997,000)	-15.99%
Total	604	$639,967,000	$598,142,500	$(41,824,500)	-6.54%

(1) The required data elements were available for 604 projects in the database.
(2) The estimate of construction costs at the end of design.

Care must be taken to accompany any reported indicators with sufficient explanation of the data presented and to allow the reader to clearly understand any limitations as to how the data should be used. For example, although SUCF has custody of a project from need identification through completion, project movement is dependent on funding. Projects can be delayed for years due to lack of funding prior to the start of design and prior to the start of construction. Although fulfillment of campus need runs from project identification through project completion, active SUCF management of the process is concentrated within the areas of design and construction. Therefore, data accompanying reported performance indicators should explain causes of delays beyond SUCF's control.

We attempted to demonstrate, using the preceding examples, how SEA indicators could be applied to SUCF's administration of construction projects, and used to report how effective SUCF is in fulfilling its mission. Our examples were not meant to be all inclusive, but rather were intended to show there is a host of indicators SUCF may choose to report. SUCF needs to initiate discussions internally and with other

interested parties to further identify and perfect key construction performance indicators.

Recommendations

1. Work with other construction agencies to identify key construction performance indicators.

2. Assess the availability of the data required for the identified indicators and develop systems needed to collect the appropriate data.

3. On at least an annual basis, publicly report the identified performance indicators.

Major Contributors to This Report

Robert Blot
David R. Hancox
Henry Kagan
Robert Lindholm
Brian Lotz
Donald Geary
William O'Toole
Mark Radley
Michael Cantwell
Paul Bachman

OFFICE OF THE STATE COMPTROLLER
ROBERT H. ATTMORE
DEPUTY COMPTROLLER

AUG 18 1994

DIV. OF AUDIT &
FINANCIAL REPORTING

STATE
UNIVERSITY
CONSTRUCTION FUND
STATE UNIVERSITY PLAZA

August 15, 1994

Mr. Robert H. Attmore
Deputy Comptroller
Division of Management Audit
& Financial Reporting
Office of the State Comptroller
Gov. A. E. Smith State Office Bldg.
Albany, New York 12236

Dear Mr. Attmore:

We are in basic agreement with the findings and recommendations made in Audit Report No. 94-S-24, State University Construction Fund: Performance Indicators. The Fund agrees that the concept of reporting performance accomplishments through the use of such indicators has the potential for meaningful presentation.

Concerning Recommendation No. 1, the Fund has briefed the Council of Contracting Agencies on this initiative and recommends that the Office of the State Comptroller provide that group with a complete presentation. In regard to Recommendation Nos. 2 and 3, the Fund will continue to review its data with the objective of developing Performance Indicator type reporting which can be published.

In the meantime, we will continue to look forward to examples of such reporting that have been successfully implemented in peer situations.

Sincerely,

Irving H. Freedman

cc: Mr. Stephen Fletcher
Mr. Raymond Wolfe

Appendix B

Irving H. Freedman, General Manager, Post Office Box 1946, Albany, NY 12201-1946 (518) 443-5701 / FAX 443-5509

Bibliography

Governmental Accounting Standards Board. Service Efforts and Accomplishments Reporting: Its Time Has Come - An Overview. Research Report, September 1990.

Governmental Accounting Standards Board. Concepts Statement No. 2 of the Governmental Accounting Standards Board on concepts related to Service Efforts and Accomplishments Reporting, April 1994

U.S. General Accounting Office. Program Performance Measures - Federal Agency Collection and Use of Performance Data, Report, May 1992.

U.S. Department of the Treasury. Criteria for Developing Performance Measurement Systems in the Public Sector, Office of Planning and Management Analysis Working Paper Series, May 1992.

U.S. General Accounting Office. Performance Measurement: An Important Tool in Managing For Results, Testimony, May 1992.

U.S. General Accounting Office. Performance Budgeting - State Experiences and Implications for the Federal Government, Report, February 1993.

U.S. General Accounting Office. Improving Government - Need to Reexamine Organization and Performance, Testimony, March 1993.

U.S. General Accounting Office. Improving Government - Measuring Performance and Acting on Proposals for Change, Testimony, March 1993.

U.S. General Accounting Office. Program Evaluation Issues, Transition Series Report, December 1992.

U.S. General Accounting Office. Government Management Issues, Transition Series Report, December 1992.

State of Florida Office of the Auditor General. Assessment of the State University System of Florida Accountability Plan, Report, December 1991.

State of Florida Office of the Auditor General. A Review of the Department of Transportation Performance Measures, Audit Report No.12012, February 1993.

State of Georgia Department of Audits. Performance Audit Department of Education Vocational Education Laboratory Program, Audit Report, February 1993.

State of Georgia Department of Audits. Performance Audit Department of Community Affairs Local Development Fund, Audit Report, March 1993.

Appendix C

State of Georgia Department of Audits. Performance Audit Department of Technical and Adult Education Office of Adult Literacy Programs, Audit Report, March 1993.

King County Auditor's Office; Seattle, Washington. Special Study - County Agency Performance Monitoring Survey, Report No. 91-3, September 1991.

Office of the City Auditor; Portland, Oregon. City of Portland Service Efforts and Accomplishments: 1991-92, Second Annual Report on City Government Performance, January 1993.

Epstein, Paul D. "Get Ready: The Time for Performance Measurement Is Finally Coming!" Public Administration Review, September/October 1992, Vol.52, No.5.

Fischer, Mary L.; Gordon, Teresa P. "Toward Better Annual Reports for Colleges and Universities." Government Accountants Journal, Summer 1991.

Raaum, Ronell B.; Soniat, Edwin. "Measurement Based Performance Audits: A Tool for Downsizing Government." Government Accountants Journal, Summer 1993.

Duquette, Dennis J., CPA; Stowe, Alexis M., CPA. "Enter the Era of Performance Measurement Reporting." Government Accountants Journal, Summer 1992.

Alwin, Lawrence F., CPA. "How Far Can We Go? - Measuring Performance in Government." Action Alert, Texas State Auditor's Office, September 21, 1992.

Ridenour, Matt. "Performance Accountability System: Services and Costs - Setting the Stage." Government Services Newsletter, KPMG Peat Marwick, New York Vol. 10 No. 3, May 1993.

Anderson, Bridget. "Performance Accountability System: Identifying Services and Costs." Government Services Newsletter, KPMG Peat Marwick, New York Vol. 10 No. 3, May 1993.

Finn, Chester E., Jr. "The Case For National Testing - Measuring what children learn will introduce a necessary principle to American education - accountability." The GAO Journal, Summer/Fall 1991.

Association of Government Accountants. Report of the Task Force on Performance Auditing, Report, February 1993.

Craig, Susan J. "Performance Standards in the Fight Against Lost Revenues." MT, July/August 1992.

City of New York. The Mayor's Management Report, September 17, 1992.